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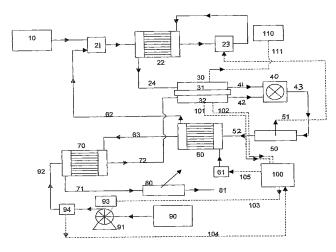
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(54) Title: A METHOD AND APPARATUS FOR OPERATING A SOLID-OXIDE FUEL CELL STACK WITH A MIXED IONIC/ELECTRONIC CONDUCTING ELECTROLYTE



SOFC system operating on LPG showing method of implementation described in Method  $\boldsymbol{1}$ 

(57) Abstract: A method and apparatus for operating an intermediate-temperature solid-oxide fuel cell stack (10) with a mixed ionic/electronic conducting electrolyte in order to increase its efficiency. The required power output of the solid-oxide fuel cell stack (10) is determined and one or more operating conditions of the solid fuel cell stack (10) are controlled dependent upon the determined required power output. The operating conditions that are controlled may be at least one or the temperature of the fuel cell stack and the dilution of fuel delivered to the fuel cell stack.



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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.